

## II. Remarks

Claims 1-20 were pending in this application and have been rejected. The present amendment cancels claim 15, and amends claims 1, 6-7, 12, 14, 16-17 and 20 to correct minor typographical errors and to more particularly point out and clarify Applicants' invention. No new matter has been added by the present amendment. After this amendment, claims 1-14 and 16-20 will be pending.

Reconsideration of the application in view of the above amendments and following remarks is respectfully requested.

### Drawings

The drawings were objected to under 37 C.F.R. §1.83(a). In particular, the stated reason for the objection is that the drawings must show the spiral spring recited in claim 2, line 3 or the feature must be cancelled from the claim. Applicants' respectfully disagree and believe that the spiral spring recited in claim 2 is shown in Figure 2, reference number 7, which is further disclosed in paragraph [0078] of Applicants' application. Accordingly, Applicants believe that the objection to the drawings should be withdrawn.

### Amendment Format

Applicants note that the deletion of "a rotation" was not properly marked in accordance with 37 CFR 1.121(c) in the previous reply, filed April 28, 2009. Applicants'

have amended claim 12 to properly indicate the deletion of "a rotation" and accordingly, believe that this amendment has cured the respective objection.

Rejections under 35 U.S.C. §112

Claims 1-20 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as their invention. Claim 15 has been cancelled by the present amendment and therefore, the rejection of claim 15 is now moot. In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claims 1-14 and 16-20 are traversed.

Claim 1 has been amended to recite the torque generated by the first torque generating system is set lower than the torque generated by the second torque generating system which is generated during controlling by the control system. This amendment was in response to an objection that it was unclear what torques are referred to in claim 1. Accordingly, Applicants believe that the amendment to claim 1 has cured the respective objection.

Claim 6 has been amended to recite that an elastic force of the elastic member in the power transmission cushioning system is larger than the force generated by the first torque generating system when the elastic member is substantially compressed. This amendment was in response to an objection that claim 6 was unclear because the elastic force would vary depending upon the

amount it is compressed. Accordingly, Applicants believe that the amendment to claim 6 has cured the respective objection.

Claim 12 has been amended to recite that the webbing action detection system determines that the webbing is in the webbing stoppage state when the webbing is not in either in the webbing drawing out state or the webbing winding state. This amendment was in response to an objection that claim 12 appears to be inaccurate because a finite constant rotary speed or a decreased rotary speed of the spindle would indicate winding or unwinding of the webbing and not a webbing stoppage state. Accordingly, Applicants believe that the amendment to claim 6 has cured the respective objection.

Accordingly, Applicants believe that the 35 U.S.C. § 112, second paragraph, rejections of claims 1-14 and 16-20 have been cured.

Rejections under 35 U.S.C. § 103

Claims 1-4, 15, 16 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0189880 issued to Tanaka, et al. ("Tanaka"), in view of U.S. Patent No. 6,499,554 issued to Yano, et al. ("Yano"). Claim 15 has been cancelled by the present amendment and therefore, the rejection of claim 15 is now moot. In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claims 1-4, 16 and 20 are traversed.

Claim 1 has been amended to recite that the torque generated by the first torque generating system is set so as to not enable complete winding of the webbing by only the first torque generating system. A control system is for controlling the torque generated by the second torque generating system according to a seat belt fastening state and a dangerous state. The seat belt fastening state is one of a fastened seat belt state and a non-fastened seat belt state. A seat belt fastening state detecting system is incorporated into a buckle. The seat belt fastening detection system is operable to detect the seat belt fastening state based on whether or not a tongue is engaged with the buckle. A dangerous state detecting system is for detecting whether or not the vehicle is in the dangerous state. The second torque generating system is used repeatedly. The torque generated by the first torque generating system is set lower than the torque generated by the second torque generating system which is generated during controlling by the control system so as to reduce a passenger's oppressive sensation caused by a fastened condition of the seat belt. Support for these amendments may be found in Applicants' application at paragraph [0097].

Tanaka discloses a seatbelt retractor 1 comprising a power-transmission gear mechanism 11 for transmitting power of a motor 10, a reducer mechanism 12 for reducing the rotation of the motor 10 transmitted from the power-transmission gear mechanism 11 to a spool 4; a power-transmission route switching mechanism 13 for selectively switching between states that the power of the motor 10 is transmitted to the spool 4; and spring means 14 for urging the spool 4 in a winding direction for winding a seatbelt webbing. *Tanaka* at paragraph [0009]. The rotational speed  $V_s$

of winding of the seatbelt webbing by the spring means 14 is set to be larger than a rotational speed  $V_M$  of winding of the seatbelt webbing by the motor 10 ( $V_S > V_M$ ). As shown in Figure 6, when a tongue is removed from a buckle in wearing the seatbelt webbing 3, the seatbelt webbing is mechanically wound about the spool 4 by the urging force of the return spring 54 of the spring means 14. When the spring means 14 is normal (e.g. without deterioration due to aging or the alike), the belt winding operation is normal as indicated by a solid line in Figure 6 and the entire amount of the seatbelt webbing is directly wound by the spring means 14 (the entire amount of the seatbelt webbing is stored by the spring means 14). When the belt winding operation of the spring means is not normal (e.g. deteriorated due to aging, etc.), and it is difficult to wind the entire amount of the seatbelt webbing, the entire amount of the seatbelt webbing, as indicated by a projected in Figure 6, is wound by the power of the motor 10. *Id.* at paragraphs [0060]-[0064]. Notable, the spring means 14 is set to wind the entire amount of the seatbelt webbing which is unlike Applicants' claimed invention where the first torque generating system is set so as to not enable complete winding of the webbing. Moreover, Tanaka 's motor 10 is turned on only when the spring means 14 has become deteriorated by aging or the alike, where the motor 10 is set so that the rotation speed of the webbing  $V_M$  via the motor 10 is smaller than the rotational speed of the webbing  $V_S$  via the spring means 14 in the normal condition. Furthermore, Tanaka completely fails to disclose any relationship between the torque generated by the spring means 14 and the torque generated by the motor 10. Applicants' invention as recited in claim 1 sets the torque generated by the first torque generating system lower than the torque

generated by the second torque generating system to reduce a passenger's oppressive sensation. Tanaka's motor 10 is used only to compensate for a broken or defective spring means 14 for winding the webbing, and is configured to reduce belt tension on the passenger.

Additionally and as noted by the Examiner, Tanaka fails to disclose that the retractor includes a spindle locking system and thus, the Examiner depends on Yano for the disclosure of the locking system. Office action at page 5. Yano, however, discloses a seat belt retractor including a motor but fails to disclose a spring that is set so as to not enable complete winding of the webbing, or any relationship between the torque generated by a spring and the torque generated by the motor. *Yano* at Abstract. Thus, neither Tanaka nor Yano independently or in combination disclose, teach or suggest the present invention recited in claim 1. More specifically, neither Tanaka nor Yano disclose, teach or suggest that (1) a torque generated by a first torque generating system is set so as to not enable complete winding of a webbing by only the first torque generating system, and that (2) a torque generated by the first torque generating system is set lower than a torque generated by a second torque generating system to reduce a passenger's oppressive sensation caused by a fastened condition of the seat belt. In that both Tanaka and Yano lack the noted elements of claim 1, the rejections based thereon should be withdrawn. Accordingly, Applicants' believe that claim 1 and its dependent claims 2-4, 16 and 20 are in a condition for allowance.

Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka, in view of Yano, and further in view of U.S. Publication No.

2003/0201359 issued to Peter ("Peter"). In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claims 5 and 6 are traversed.

Since claims 5 and 6 depend from claim 1 and since Peter fails to disclose (1) a torque generated by a first torque generating system is set so as to not enable complete winding of a webbing by only the first torque generating system, and that (2) a torque generated by the first torque generating system is set lower than a torque generated by a second torque generating system to reduce a passenger's oppressive sensation caused by a fastened condition of the seat belt, the combination of Tanaka, Yano and Peter cannot render the claims as obvious. Accordingly, Applicants believe that claims 5 and 6 are in a condition for allowance.

Claims 7-13, 18, and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka, in view of Yano, and further in view of U.S. Patent No. 6,427,935 issued to Fujii, et al. ("Fujii"). In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claims 7-13, 18, and 19 are traversed.

Claim 7 has been rewritten in independent form and further amended to recite that the torque generated by the first torque generating system is set so as to not enable complete winding of the webbing by only the first torque generating system. The torque generated by the first torque generating system is set lower than the torque generated by the second torque generating system which is generated during controlling by the control system so as to reduce a passenger's oppressive sensation caused by a fastened condition of the seat belt.

As discussed in the forgoing paragraphs, neither Tanaka nor Yano independently or in combination, disclose, teach or suggest (1) a torque generated by a first torque generating system is set so as to not enable complete winding of a webbing by only the first torque generating system, and that (2) a torque generated by the first torque generating system is set lower than a torque generated by a second torque generating system to reduce a passenger's oppressive sensation caused by a fastened condition of the seat belt. These recited limitations of Applicants' present invention are also not disclosed by Fujii. Accordingly, Applicants believe that claim 7 and its dependent claims 8-13, 18, and 19 are in a condition for allowance.

Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka, in view of Yano, and Fujii, and further in view of U.S. Patent No. 6,485,057 issued to Midorikawa, et al. ("Midorikawa"). In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claim 14 is traversed.

Since claim 14 depends from claim 7 and since Midorikawa fails to disclose (1) a torque generated by a first torque generating system is set so as to not enable complete winding of a webbing by only the first torque generating system, and that (2) a torque generated by the first torque generating system is set lower than a torque generated by a second torque generating system to reduce a passenger's oppressive sensation caused by a fastened condition of the seat belt, the combination of Tanaka, Yano, Fujii and Midorikawa cannot render the claim as



obvious. Accordingly, Applicants believe that claim 14 is in a condition for allowance.

Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka, in view of Yano, and further in view of Midorikawa. In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claim 17 is traversed.

Since claim 17 depends from claim 1 and since Midorikawa fails to disclose (1) a torque generated by a first torque generating system is set so as to not enable complete winding of a webbing by only the first torque generating system, and that (2) a torque generated by the first torque generating system is set lower than a torque generated by a second torque generating system to reduce a passenger's oppressive sensation caused by a fastened condition of the seat belt, the combination of Tanaka, Yano, and Midorikawa cannot render the claim as obvious. Accordingly, Applicants believe that claim 17 is in a condition for allowance.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is requested.

Respectfully submitted,

Dated: October 13, 2009

/Daniel P. Dailey/  
Daniel P. Dailey, Reg. No. 54,054  
Attorney for Applicants

BRINKS HOFER GILSON & LIONE  
524 SOUTH MAIN STREET  
SUITE 200  
ANN ARBOR, MI 48104  
(734) 302-6000